

WHAT IS CLAIMED IS:

1. A protective relay for providing protective control to a power system, comprising:

a microprocessor;

first and second connections to a communications network and the power system, respectively;

a communications server configured to receive relay configuration commands from a remote computer over the communications network in a network format, and to provide power system data and relay status data to the remote computer over the communications network in the network format.

2. The relay of claim 1, wherein the communications network is the Internet and the network format is the hypertext transfer protocol.

3. The relay of claim 2, wherein the remote computer incorporates an Internet browser to allow a user to interface with the protective relay.

4. The relay of claim 1, wherein the microprocessor supports one or more of: hypertext transfer protocol, hypertext markup language, and Java Applets.

5. The relay of claim 1, wherein the communications server includes an HTML file server.

6. The relay of claim 1, wherein the communications server includes an HTTP protocol server.

7. The relay of claim 1, wherein the communications server communicates with the remote computer over a local area network (LAN).

8. The relay of claim 1, wherein the communications server communicates with the remote computer via the Internet and at least one router.

9. The relay of claim 8, wherein the communications server communicates with the remote computer via the Internet, at least a second router, and a remote Local Area Network (LAN).

10. The relay of claim 8, wherein the communications server communicates with the remote computer via the Internet, a public switched telephone network (PSTN), and at least one modem.

11. The relay of claim 1, wherein the communications server operates according to instructions provided in a C++ code.

12. The relay of claim 1, wherein the communications server includes one or more of the following protocol layers: secure socket layer, transmission control protocol, internet protocol, and point-to-point protocol.

13. The relay of claim 1, wherein the communication server receives a command from the remote computer, generates dynamic HTML data in response to the command if the command is of a first type, and generates previously-stored static data in response to the command if the command is of a second type.

14. A method for monitoring and/or controlling a protective relaying device, comprising the steps of:

receiving, at the protective relaying device, one or more commands from a remote device over a physical communications link [which includes the Internet];

generating, in the relay, HTML data dynamically in response to the one or more commands if the commands are of a first type, and transmitting the HTML data to the remote device over the physical communications link; and

generating, in the relay, static data from previously-stored data files in response to the one or more commands if the one or more commands are of a second type, and transmitting the static data to the remote device over the communications link.

15. The method of claim 14, wherein the static data includes Java applet files.

16. The method of claim 14, wherein the steps of generating are performed by consulting a database in the protective relay, the database storing protective relay data.

17. A protective relay for providing protective control to a power system, comprising:

a database storing data including protective relay control settings and power system data;

a file system server operatively connected to the database, the file system server capable of generating HTML files from the data stored in the database;

a communication protocol server operatively connected to the file system server and to a communication network, the communication protocol server capable of transmitting and receiving HTML files according to a hypertext transfer protocol over the communications network.

18. The relay of claim 17, wherein the HTML files are exchanged with a remote computer having a web browser.

19. The relay of claim 17, wherein the HTML files received by the communication protocol server contain relay configuration commands.

20. The relay of claim 17, wherein the HTML files received by the communication protocol server contain requests for data in the database.

21. The relay of claim 20, wherein the requests are one of a first type and a second type, the first type requesting dynamically generated HTML data and the second type requesting static data.

Sub B1

09605010-062700

, when

Sub B1)

[illegible]